

EXHIBIT 4

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

OYSTER OPTICS, LLC,
Plaintiff,

v.

INFINERA CORPORATION, CORIANT
(USA) INC., CORIANT NORTH
AMERICA, LLC, and CORIANT
OPERATIONS, INC.,
Defendants.

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Case No. 2:19-cv-00257-JRG

CLAIM CONSTRUCTION MEMORANDUM OPINION AND ORDER

In this case, Oyster Optics, LLC, alleges Infinera Corporation, Coriant (USA) Inc., Coriant North America, LLC, and Coriant Operations, Inc., (collectively, “Defendants”) infringe certain claims of U.S. Patent No. 6,665,500 (the “’500 Patent”).

The abstract of the ’500 Patent describes it as concerning a fiber optic telecommunications system and method that each create phase-modulated optical signals from a data stream in one mode and amplitude-modulated optical signals from a data stream in another mode.

The parties dispute only one aspect of claim scope: whether the claimed inventions exclude the use of amplitude modulation when operating in the phase-modulation mode. Having considered the parties’ claim-construction briefing, the Court concludes such a broad exclusion is not proper.

I. BACKGROUND

A. The '500 Patent

According to the '500 Patent, prior-art fiber optic networks included a laser, an amplitude modulator that “pulses or alters the laser output to create an amplitude-modulated optical signal representative of [an] electronic data stream,” and a receiver that “typically includes a photodiode to convert the optical signals back into the electronic data stream.” '500 Patent at 1:12–22. The patent characterizes the laser and amplitude modulator together as “a transmitter for transmitting the optical signal over an optical fiber” to the receiver. *Id.* at 1:16–19.

But these types of networks are vulnerable to “tapping”:

[O]ptical fibers can be spliced or even merely clamped so as to obtain optical signals from the fiber. It also may be possible to tap fibers without physically touching the optical fiber, for example by reading energy emanating or dissipating along the fiber. Amplitude-modulated optical signals, with their ease of detection from a photodiode, require that only a small amount of energy be tapped and passed through the photodiode in order to be converted into a tapped electronic data stream.

Id. at 1:28–37. The patent describes a number of prior-art references that attempt to address this vulnerability using phase modulation rather than amplitude modulation, but ultimately concludes the teachings of those references are not compatible with existing receivers. *See id.* at 1:57–2:22.

To address this lack of compatibility, the '500 Patent teaches a system and method for transmitting and receiving *either* phase-modulated or amplitude-modulated signals. *Id.* at 4:4–20. More specifically, the patent describes using one of three transmission modes: phase-modulation, amplitude-modulation, or both phase- and amplitude-modulation. *Id.* at 2:41–44.

Each of the claims recites using amplitude modulation in one mode and phase modulation in another mode. For example, Claim 1 recites:

An optical data transmitter comprising:

- a laser;
- a phase modulator for phase modulating light from the light source;
- and
- a controller having an input for receiving an electronic data stream, the controller in a *first mode controlling the phase modulator so as to create phase-modulated optical signals* in the light from the laser as a function of the electronic data stream and the controller in a *second alternate mode amplitude-modulating the light from the laser as a function of the electronic data stream*, the first mode and the second mode occurring at different times.

Id. at 8:29–40 (emphasis added). Claim 16 similarly recites:

A dual-mode optical transmission system comprising:

- a transmitter having a laser for transmitting *amplitude-modulated signals in a first mode* and *phase-modulated signals in a second mode* and a controller for switching an output of the laser between the first mode and the second mode, the second mode occurring at a different time than the first mode;
- an optical fiber connected to the transmitter; and
- a receiver having an interferometer being connected to the optical fiber.

Id. at 10:1–11 (emphasis added). And method Claim 17 requires:

- phase modulating light from a laser during a first transmission mode* so as to transmit phase-modulated optical data; and
- amplitude modulating light from the laser during a second alternate transmission mode* so as to transmit amplitude-modulated optical data, the second alternate transmission mode occurring at a time separate from the first transmission mode.

Id. at 10:14–21 (emphasis added).

The parties now dispute whether the claimed invention excludes the use of any amplitude modulation during the phase-modulation mode. Oyster claims the '500 Patent provides no intrinsic reasoning for such an exclusion. Defendants, on the other hand, contend the '500 Patent so disparages amplitude modulation that exclusion is warranted, which aligns with the Court's construction of "phase modulate" in other litigation between these parties. Defendants also argue prosecution history and two forms of estoppel support their proposed construction.

B. The Related Litigation

This is not a new dispute to these parties. They first contested the meaning of "phase modulate" in *Oyster Optics, LLC v. Coriant Am. Inc. et al.*, No. 2:16-cv-01302-JRG ("*Oyster I*"), a lawsuit concerning seven patents that also relate to fiber optic data systems and have the same named inventor as the '500 Patent. Three of the *Oyster I* patents concern "phase-modulated fiber optic telecommunications system[s]" intended to "improv[e] security and data transmission over fiber optic networks." U.S. Patent No. 6,469,816 at (54), 1:14–16; *see also* U.S. Patent No. 6,594,055 at (54), 1:9–11; U.S. Patent 6,476,952 No. at (54), 1:14–16. The other four patents disclose embodiments of fiber optic transceiver cards "for providing secure optical data transmission over optical fiber." U.S. Patent No. 7,620,327 at 2:18–20; *see also* U.S. Patent No. 6,476,952 at 2:27–28; U.S. Patent No. 8,374,511 at 2:22–24; U.S. Patent No. 8,913,898 at 2:24–26.

In *Oyster I*, Defendants argued "phase modulate" should exclude amplitude modulation for three reasons. First, the *Oyster I* patents expressly describe "phase-modulated signals" as having constant amplitude. Dkt. No. 73-4 at 11. Second, varying the amplitude during phase modulation defeats the purpose of the inventions by exposing the data to photodiode optical taps. *Id.* at 11–13. Third, the specifications consistently disparage amplitude-modulated signals as easily tapped. *Id.* at 13–14. Oyster, however, argued "phase modulate" should not exclude amplitude modulation,

relying on expert testimony, the doctrine of claim differentiation, and excerpts from the specifications stating that amplitude-modulated transmitters could be used. Dkt. No. 73-5 at 5–6.

Ultimately, Chief Judge Gilstrap held that phase modulation, as used in the claims of the *Oyster I* patents, required “keeping the amplitude of the light constant” Dkt. No. 73-6 at 18. Judge Gilstrap reasoned that the patents repeatedly distinguish between phase modulation and amplitude modulation and “disparage amplitude-modulated optical signals as being easily tapped.” *Id.* at 14. Thus, wrote Judge Gilstrap, “the specification explains that the desired benefits of phase modulation are obtained only in the *absence* of amplitude modulation.” *Id.* at 17 (citing ’898 Patent at 4:44–52). The Court acknowledged that amplitude and phase modulation were not necessarily mutually exclusive. *Id.* at 16. But the Court concluded that “on balance, in light of the disparagement of prior art involving amplitude modulation, and in light of the disclosures of the advantages of using phase modulation instead of amplitude modulation, the ‘phase modulate’ terms should be interpreted so as to exclude amplitude modulation.” *Id.* at 17.

Defendants then moved for partial summary judgment of noninfringement. *See generally* Dkt. No. 73-7. In opposing the motion, Oyster sought clarification that the Court’s construction only excluded amplitude modulation—not *any* variation in amplitude. The Court ultimately adopted the construction Defendants now propose—that “[u]se of phase modulation excludes use of *amplitude* modulation.” Dkt. No. 73-8 at 9 (emphasis added).

Neither Oyster’s lawsuit against the Coriant defendants nor its lawsuit against Infinera went to trial. In July 2018, the Court granted the Oyster and Coriant defendants’ joint motion to dismiss that lawsuit under Fed. R. Civ. P. 41(a)(1)(A)(ii). Dkt. No. 643 in *Oyster I*. As for Infinera, Oyster filed a second complaint in May 2018. Dkt. No. 1 in *Oyster Optics, LLC v. Infinera Corp.*, No. 2:18-cv-00206-JRG (“*Oyster II*”). The Court severed the first Infinera case from *Oyster I* and con-

solidated the two cases. Dkt. No. 73-9. Oyster’s second case asserted a new patent against Infinera, but the parties stipulated that claim terms addressed in the first *Markman* hearing would not be revisited. Dkt. No. 595-1 in *Oyster I*. Ultimately, the Court granted Infinera summary judgment on its license and release defenses. Dkt. No. 73-10.

II. LEGAL STANDARDS

“[T]he claims of a patent define the invention to which the patentee is entitled the right to exclude.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (citing *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). As such, if the parties dispute the scope of the claims, the court must determine their meaning. *See, e.g., Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 390 (1996).

When construing claims, “[t]here is a heavy presumption that claim terms are to be given their ordinary and customary meaning.” *Aventis Pharm. Inc. v. Amino Chems. Ltd.*, 715 F.3d 1363, 1373 (Fed. Cir. 2013) (citing *Phillips*, 415 F.3d at 1312–13; *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). Courts must therefore “look to the words of the claims themselves . . . to define the scope of the patented invention.” *Id.* (ellipsis in original) (citations omitted). The “ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Phillips*, 415 F.3d at 1313 (citations omitted). This “person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Id.*

Intrinsic evidence is the primary resource for claim construction. *See Power-One, Inc. v. Artesyn Techs., Inc.*, 599 F.3d 1343, 1348 (Fed. Cir. 2010) (citing *Phillips*, 415 F.3d at 1312). For

certain claim terms, “the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Phillips*, 415 F.3d at 1314 (citation omitted); *see also Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1319 (Fed. Cir. 2005) (“We cannot look at the ordinary meaning of the term . . . in a vacuum. Rather, we must look at the ordinary meaning in the context of the written description and the prosecution history.”) (ellipsis in original) (citations omitted). But for claim terms with less-apparent meanings, “the court looks to ‘those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean.’” *Phillips*, 415 F.3d at 1314. (quoting *Innova*, 381 F.3d at 1116). “Those sources include ‘the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.’” *Id.* (quoting *Innova*, 381 F.3d at 1116) (citations omitted).

III. DISCUSSION

Disputed Term	Oyster’s Proposed Construction	Defendants’ Proposed Construction
“phase modulate” and variants <ul style="list-style-type: none"> Claims 1, 8, 16, 17, 19 	alter the phase of light to create an optical signal having a phase that is representative of the data	alter the phase of light to create an optical signal having a phase that is representative of data. Use of phase modulation excludes use of amplitude modulation.

As they did in *Oyster I*, the parties dispute whether the proper construction of “phase modulate” excludes amplitude modulation. Oyster relies entirely on the ’500 Patent for its position. Defendants, on the other hand, rely on the prosecution history, collateral estoppel, and judicial estoppel in addition to the patent’s specification in support of their construction.

The parties frame the dispute around the meaning of “phase modulate,” but the issue is more nuanced. After all, the parties agree that “phase modulating” a data stream means “alter[ing] of the phase of light to create an optical signal having a phase that is representative of data.” The dispute more precisely concerns whether the claim term “phase modulate” limits the operation of the claimed invention in the phase-modulating mode to exclude the use of *any* amplitude modulation. See Dkt. No. 73 at 21 (“[T]he claim construction issue before the Court relates to the *phase modulation mode*, and whether this . . . mode can include amplitude modulation.”).

A. The Specification and Claims

Oyster relies almost entirely on the express language of the ’500 Patent. It first notes that the Summary of the Present Invention contemplates using both a phase- and amplitude-modulated transmission mode in the same system. Dkt. No. 70 at 5–6 (citing ’500 Patent at 2:41–47). Further, Oyster contends that the specification describes combining phase modulation with amplitude modulation. *Id.* at 6 (citing ’500 Patent at 3:27–30). Oyster stresses Claim 19’s recitation of “light in *both* amplitude-modulated *and* phase modulated” modes. *Id.* at 6 (citing ’500 Patent at 10:26–28). “It cannot be,” says Oyster, “that the term ‘phase modulate’ in the context of the ’500 patent ‘excludes’ amplitude modulation, when the patent discloses and claims modes that utilize both phase modulation and amplitude modulation simultaneously.” *Id.*

According to Defendants, however, the ’500 Patent is “replete with statements that optical signals in its invention are either phase-modulated or amplitude-modulated—but not both.” Dkt. No. 73 at 12. Defendants say the patent distinguishes between a phase-modulation mode and amplitude-modulation mode and teaches that the amplitude of the transmitted light is kept constant during the phase-modulation mode. *Id.* at 12–13. Defendants also emphasize that the ’500 Patent incorporates one of the *Oyster I* patents—U.S. Patent 6,594,055—which clearly teaches a secure

phase-modulation mode that excludes amplitude modulation. *Id.* at 14.

In *Oyster I*, Chief Judge Gilstrap considered similar arguments by the parties, but ultimately concluded the *Oyster I* patents: (1) disparage the prior art involving amplitude modulation; and (2) proclaim advantages of using phase modulation instead of amplitude modulation. Accordingly, Judge Gilstrap held “phase modulate” in the claims of the *Oyster I* patents should be interpreted to exclude amplitude modulation. Dkt. No. 73-6 at 17–18. Defendants argue that same reasoning applies here.

But there is a critical difference between the ’500 Patent and the *Oyster I* patents. Although the ’500 Patent has similar language to that found in the *Oyster I* patents, the specification expressly contemplates “a mixture of phase and amplitude modulation” ’500 Patent at 4:37–41 (noting “amplitude modulated signals not related to the input optical data stream could be transmitted during the secure phase-modulation mode without necessarily affecting security”). Similarly, the patent “permits a phase-modulated transmission mode or an amplitude-modulated transmission mode, or *both* a phase and amplitude modulated transmission mode” *Id.* at 2:41–45 (emphasis added).

Defendants try to explain away these passages. For example, they argue that “rather than transmit signals that are both phase modulated and amplitude modulated at the same time, the ’500 Patent teaches ‘switching between the phase modulating and the amplitude modulated steps.’” Dkt. No. 73 at 13 (citing ’500 Patent at 4:27–28). According to Defendants:

The correct reading is that the invention encompasses a phase-modulated transmission mode, an amplitude-modulated mode, or both of these two modes. ’500 patent at 2:41-47. This is clear from the phrase “which can permit the transmitter to work with different types of receivers,” which immediately follows the discussing of having both a phase and amplitude modulated mode. *Id.* This phrase shows that the two are alternatives that allow compatibility with different types of receivers—not that they are combined, which would require a specialized

receiver capable of handling both phase and amplitude modulation together. *See id.*

Id. at 20.

But the specification undercuts this argument by disclosing a “specialized receiver,” which “can read a *mixed* optical signal of both phase-modulated and direct and delayed amplitude-modulated signals” ’500 Patent at 3:62–64 (emphasis added).¹ The patent differentiates the “mixed” signal from a simple switching between signal types. *See id.* at 4:36–43 (referring to simultaneous amplitude- and phase-modulation as “a mixture of phase and amplitude modulation”).

Defendants also contend the patent’s disclosure that “amplitude modulated signals not related to the input optical data stream could be transmitted ... without necessarily affecting security” refers to control or other non-data information. Dkt. No. 73 at 22 (quoting *id.* at 4:36–43) (ellipsis in original) (bolding omitted). Yet there is no support for this in the description, and the passage could just as easily refer to a data stream. Moreover, even if the same data stream was both phase- and amplitude-modulated, Defendants do not show that the phase-modulated optical *signal* would not be any less secure.

Finally, many of the passages on which Defendants rely refer to specifically disclosed embodiments. *See, e.g., id.* at 11 (citing ’500 Patent at 6:8–19, 7:52–57, 8:12–16); *id.* at 13 (citing ’500 Patent at 5:34–35). Defendants, however, do not provide sufficient reasoning for why these embodiments should be imported into the claims. Courts “do not import limitations into claims from examples or embodiments appearing only in a patent’s written description . . . unless the specification makes clear that ‘the patentee ... intends for the claims and the embodiments in the

¹ This does not mean the receiver would necessarily *use* both the phase- and amplitude-modulated components of such a mixed signal. Referring to Figure 2, for example, the user would select which of the signals to use with switch 39. *See id.* at 7:31–44 (describing use of switch 39 to connect either the photodiode 35 or the filter 50 to the output 37).

specification to be strictly coextensive.’” *JVW Enters., Inc. v. Interact Accessories, Inc.*, 424 F.3d 1324, 1335 (Fed. Cir. 2005) (second ellipsis in original) (quoting *Phillips*, 415 F.3d at 1323). The specification provides no such clarity here and the Court will not read in such a limitation.

B. Claim Differentiation

Oyster also briefly argues that Defendants’ proposed construction should be rejected under the doctrine of claim differentiation. Specifically, Oyster refers to Claim 18’s recitation of a “first transmission mode” that is phase-modulated but “not amplitude-modulated.” This is in contrast to Claim 17, which it depends from and has no such distinction. *See* Dkt. No. 70 (citing ’500 Patent at 10:14–16, 10:22–25). According to Oyster, if “phase modulation” already excludes amplitude modulation, Claim 18’s negative limitation is superfluous. *Id.* at 6–7.

Defendants counter that the Court rejected a similar claim-differentiation argument in *Oyster I*. Dkt. No. 73 at 19 (citing Dkt. No. 157 at 9 in *Oyster I*). Defendants stress that the doctrine is merely a “useful analytic tool [that] cannot enlarge the meaning of a claim beyond that which is supported by the patent documents, or relieve any claim of limitations imposed by the prosecution history.” *Fenner Invs., Ltd. v. Cellco P’ship*, 778 F.3d 1320, 1327 (Fed. Cir. 2015) (citations omitted). But given the reasoning set forth above with respect to the specification and prosecution history, there is no such conflict here. Accordingly, the doctrine of claim differentiation bolsters Oyster’s position on this record.

C. The Prosecution History

On the other hand, Defendants contend the prosecution history of the ’500 Patent supports their construction. Dkt. No. 73 at 15–16. Their argument stems from an office action rejecting original claims 19–21.² In that action, the patent examiner rejected the claims as anticipated by

² These claims ultimately issued as Claims 17–19 of the ’500 Patent.

U.S. Patent 6,122,086 (Djupsjöbacka). *See* Dkt. No. 73-13 at 3, 8. In response, the applicant changed original Claim 19 to its final form:

A method for transmitting optical data in two modes comprising the steps of:

phase modulating light from ~~at least one light source~~ a laser during a first transmission mode so as to transmit phase-modulated optical data; and

amplitude modulating light from the ~~at least one light source~~ laser during a second alternate transmission mode so as to transmit amplitude-modulated optical data, the second alternate transmission mode occurring at a time separate from the first transmission mode.

Dkt. No. 73-14 at 4. In his remarks, the applicant argued “[Djupsjöbacka does not show] different time modes for modulating one laser. Djupsjöbacka shows simultaneous AM/PM transmission.”³ *Id.* at 7.

But the applicant’s amendments and remarks do not help Defendants. The added language concerns whether the two modes are mutually exclusive in time. In contrast, the present dispute concerns whether the two modes are mutually exclusive in their operating characteristics. Notably, there is no sound reason for why the added language would only affect the phase-modulation mode. Put another way, if the applicant’s amendment had the effect proffered by Defendants, it would not only exclude any *amplitude* modulation during the *phase*-modulation mode, but any *phase* modulation during the *amplitude*-modulation mode. Yet Defendants agree the latter is not required by the claims. *See* Dkt. No. 73 at 21 (“Defendants do not claim that ‘amplitude modulation’ must be construed to exclude phase modulation.”). This apparent inconsistency weighs against finding the prosecution history supports Defendants’ construction.

³ This correctly characterizes Djupsjöbacka, which shows a signal on a line 7 transmitted simultaneously to an amplitude modulator 3 and a phase modulator 5 through lines 19 and 21, respectively. *See* U.S. Patent 6,122,086 at fig.1; *see also id.* at (57) (noting “the signals are transmitted simultaneously in two modes in an optical fiber”).

D. Consistency with *Oyster I*'s Claim Construction Ruling

Defendants' argument also relies in large part on the '500 Patent's incorporation of U.S. Patent 6,594,055 (the "'055 Patent"). For example, Defendants stress that the '500 Patent describes the first mode as "a highly secure [sic] data transmission mode, as described in [the '055 Patent]." *Id.* at 14. Defendants argue that "[t]he '055 patent unambiguously teaches that this secure phase-modulation mode excludes amplitude modulation for the exact same reason taught in the '500 patent—security." *Id.* (citations omitted). And to construe "phase modulate" without excluding amplitude modulation would render Oyster's patents internally inconsistent. *See id.* at 16–17.

But there are key differences between these patents that do not support Defendants' conclusion. First, contrary to Defendants' assertion, the thrusts of the two patents are fundamentally different. Whereas the '055 Patent is specifically directed to a "*secure* fiber optic data transmission system," '055 Patent at (54) (emphasis added), the '500 Patent concerns compatibility between different types of transmitters and receivers, *see, e.g.*, '500 Patent at 2:20–22 (noting "[t]he phase-modulated based systems described above . . . are not compatible with existing receivers, a major disadvantage"); *id.* at 2:41–46 (noting "[t]he present invention . . . can permit the transmitter to work with different types of receivers"); *id.* at 6:20–21 (stating "[t]he present invention also provides a receiver compatible with existing transmitters"). True, the '500 Patent acknowledges the security benefits and drawbacks of phase- and amplitude-modulation, but only to explain the underlying problem—lack of compatibility between transmitters and receivers that use these different types of modulation. Second, unlike the '500 Patent, the '055 Patent does not disclose an amplitude modulator. *Compare* '055 Patent fig.1 (disclosing only phase modulator 16), *with* '500 Patent fig.1 (disclosing phase modulator 16, phase controller 86, and laser controller 88); *see also* '500 Patent at 5:14–17 (referring to amplitude modulator 88). Third, the independent

claims of the '055 Patent specifically exclude a signal that is both phase- and amplitude-modulated. '055 Patent at 6:50–55 (reciting “the phase-modulated optical signal . . . being free of amplitude modulation”), 7:58–61 (same), 8:13–15 (same), 8:48–50 (same). These material differences defeat any argument that Oyster’s proposed construction is inconsistent with either its other patents or with the Court’s prior construction of “phase modulate.”

E. Collateral and Judicial Estoppel

Defendants claim two different forms of estoppel bar Oyster from arguing that the phase-modulation mode can include amplitude modulation. First, Defendants claim Oyster is collaterally estopped because *Oyster I* resolved the issue, even though the present lawsuit involves a different patent. Dkt. No. 73 at 17–18. Second, Defendants argue Oyster is judicially estopped from taking an inconsistent claim-construction position. *Id.* at 18.

Since the issue of collateral estoppel is not unique to patent law, regional circuit law applies. *Aspex Eyewear, Inc. v. Zenni Optical LLC*, 713 F.3d 1377, 1380 (Fed. Cir. 2013). In the Fifth Circuit, collateral estoppel requires, among other things, that: (1) the issues under consideration in both the subsequent and prior action are identical; and (2) the issue was necessary to support the judgment in the prior case. *Soverain Software LLC v. Victoria’s Secret Direct Brand Mgmt., LLC*, 778 F.3d 1311, 1315 (Fed. Cir. 2015) (applying Fifth Circuit law) (citing *State Farm Mut. Auto Ins. Co. v. LogistiCare Sols., LLC*, 751 F.3d 684, 689 (5th Cir. 2014)).

Neither of these requirements are satisfied here. For one, *Oyster I* and this case present different issues. Even though the '500 Patent incorporates one of the *Oyster I* patents by reference, it has its own written description, its own prosecution history, and concerns an invention that contemplates both modulation modes. Further, where the *Oyster I* patents enable secure data transmission, the '500 Patent concerns a system for transmitting and receiving either phase-

modulated or amplitude-modulated signals, despite recognizing deficiencies of amplitude modulation. See '500 Patent at 2:26–28. These differences require a new claim construction inquiry. See *e.Digital Corp. v. Futurewei Techs., Inc.*, 772 F.3d 723, 726–27 (Fed. Cir. 2014) (noting that one patent's incorporation of another as prior art “does not change the fact that the patents are not related” and their claims must be construed separately).

Moreover, the Court's claim construction decision in *Oyster I* was not necessary to support a judgment against Infinera. The Court granted summary judgment on Infinera's license defense, which was wholly unrelated to any claim construction issues. See generally Dkt. No. 73-10.

Nor does judicial estoppel apply. When considering application of this equitable doctrine, courts consider whether “(1) a party's later position is ‘clearly inconsistent’ with its prior position, (2) the party successfully persuaded a court to accept its prior position, and (3) the party ‘would derive an unfair advantage or impose an unfair detriment on the opposing party if not estopped.’” *Organic Seed Growers & Trade Ass'n v. Monsanto Co.*, 718 F.3d 1350, 1358–59 (Fed. Cir. 2013) (quoting *New Hampshire v. Maine*, 532 U.S. 742, 750–51 (2001)).

Here, Defendants contend that Oyster changed its position in *Oyster I* after the Court's claim construction decision and argued that the correct construction of “phase modulate” requires no amplitude modulation. Dkt. No. 73 at 18. But in *Oyster I*, Oyster did not persuade the Court to accept its originally proffered construction or concede that construction was incorrect. Instead, Oyster asked for clarification given Defendants' interpretation of the Court's construction in their summary judgment motion. See Dkt. No. 73-1 at 9–18. Thus, Oyster's current position on the scope of “phase modulate” is not clearly inconsistent with its position in *Oyster I*, and judicial estoppel is not warranted.

IV. CONCLUSION

For the foregoing reasons, the Court rejects Defendants' proposed requirement that use of "phase modulate" and its variants, as that term appears in the claims of the '500 Patent, excludes use of amplitude modulation in phase-modulation mode. Accordingly, the Court construes "phase modulate" as follows:

- "phase modulate" means "alter the phase of light to create an optical signal having a phase that is representative of data."

The Court **ORDERS** each party not to refer, directly or indirectly, to its own or any other party's claim construction positions in the presence of the jury. Likewise, the Court **ORDERS** the parties to refrain from mentioning any part of this opinion, other than the actual positions adopted by the Court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the positions adopted by the Court.

SIGNED this 23rd day of July, 2020.



ROY S. PAYNE
UNITED STATES MAGISTRATE JUDGE